

NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

Newfoundland.—St. John's, December 28.—A blizzard swept over this island colony to-day and left confusion among communication mediums in its wake. The damage was not extensive, but all shipping was held to ports, train service was disrupted and roads made impassable.—*New York Times*, Dec. 29, 1920.

Capt. Ole B. Bull, whose ship, the *Bergenfjord*, of the Norwegian-American line, arrived here to-day, reported having passed a number of huge icebergs off Cape Race Saturday morning. A heavy snowstorm Saturday night delayed the steamer's arrival eight hours.—*New York Evening World*, Dec. 21, 1920.

Mexico.—Mexico City, Dec. 30.—Mexico City is surrounded by snowclad hills to-day, following the unusually cold weather of the last few days.—*New York Times*, Dec. 31, 1920.

British Isles.—Outstanding features of the weather in the British Isles during December were the wintry spell which occurred during the second week, and the unusual warmth which set in just before Christmas.

* * * The total rainfall for the month in percentages of the average was, England and Wales, 101; Scotland, 91; Ireland, 97.

* * * In London (Camden Square) the mean temperature was 40.7° F. or 0.6° F. above the average.¹

Continental Europe.—[During the first half of December] easterly wind and very cold weather, with falls of snow, were prevalent over many parts of the Continent. In Germany, central Europe, and parts of France maximum temperatures remained below freezing point on several days. * * *

After this period, low-pressure areas moved from Iceland to Scandinavia and pressure remained low in the eastern Atlantic over a very large area until the end of

the month. Temperatures rose generally over western and central Europe, and for the last week of December mild weather predominated on the Continent, except in northern Scandinavia where severe frosts occurred.²

France.—Paris, Dec. 18.—France is suffering from an unusually severe cold wave. Belfort, Bordeaux, and Marseilles report temperatures around 11 degrees above zero, Fahrenheit. Several canals in the Midi district have been frozen over, and snow has caused considerable damage in the region of Nice. In this city the cold has been severe for several days.—*Washington Evening Star*, Dec. 18 (1), 1920.

Brest, Dec. 28.—A storm of utmost violence is raging along the western coast of France. The sea is very heavy, even in the roads of Brest harbor, where a vessel was sunk last night.—*New York Evening Mail*, Dec. 28, 1920.

India.—The winter rain has so far been scanty in India.³

Japan.—Near the middle of the month a heavy storm occurred at the Japanese naval station at Kure, in which 29 vessels laden with iron and coal sank and several heavy guns were plunged into the sea by a landslide.⁴

Australia.—At the beginning of the month beneficial rain fell in New South Wales generally, but in the second week abnormally heavy rain fell over an extensive area around Sydney, doing great damage to the wheat harvest. The storm was the worst that has been experienced in the State for 70 years; 10 inches of rain was recorded in three days, the average December rainfall being 2.6 inches. The rain was particularly disastrous, coming after a three years' drought.

¹ *The Meteorological Magazine*, Jan., 1921, pp. 286-287.

² *ibid*, pp. 287 and 292.

³ *ibid*, p. 292.

DETAILS OF THE WEATHER OF THE MONTH IN THE UNITED STATES.

CYCLONES AND ANTICYCLONES.

By W. P. DAY, Observer.

Cyclones.—The number of LOWS was much above the average. The Alberta type developed numerous secondaries, particularly Colorado lows, which became important storms.

Anticyclones.—High pressure areas were also numerous, the Pacific type predominating.

Tables showing the number of LOWS and HIGHS by types follows:

Lows.

	Al- berta.	North- Pa- cific.	South Pa- cific.	North- ern Rocky Moun- tain.	Colo- rado.	Texas.	East Gulf.	South Atlan- tic.	Cent- ral.	To- tal.
December, 1920....	7.0	1.0	2.0	0.0	6.0	2.0	0.0	2.0	1.0	21.0
Average number, 1892-1912.....	4.3	2.5	0.8	0.3	1.1	2.5	0.2	0.3	0.4	12.4

Higs.

	North Pacific.	South Pacific.	Alberta.	Plateau and Rocky Moun- tain Region.	Hudson Bay.	Total.
December, 1920.....	2.0	6.0	4.0	1.0	3.0	16.0
Average number, 1892-1912....	1.1	1.2	4.7	1.3	0.5	8.8

THE WEATHER ELEMENTS.

By P. C. DAY, Climatologist and Chief of Division.

[Weather Bureau, Washington, D. C., Feb. 1, 1921.]

PRESSURE AND WINDS.

Low pressure over the North Pacific Ocean during December, 1920, favored the entrance into British Columbia and the extreme northwestern portions of the United States of numerous barometric depressions. These usually lost considerable energy on moving inland, and passed eastward, as a rule, along the northern borders of the United States. On the other hand, the high areas frequently entered the United States from the middle Pacific and to the southward of the lows, instead of through the Canadian Northwest, as is usual during a winter month, and pursued their easterly courses south of their normal tracks. As a result of these variations from normal conditions the average pressure for the month was lowest along the Canadian border and highest in the extreme south with a frequent resultant flow of warm air from the south into the more northern districts.

For the month as a whole pressure was below the normal in practically all portions of the United States, and likewise in Canada as far as records disclose. This is an exact reversal of the pressure distribution during the preceding month when the averages were almost wholly above the normal in both countries.

PRINCIPAL STORMS.

On the 1st and 2d a low-pressure area moved from the lower Lakes to New England, increasing greatly in severity as it approached the Atlantic coast, where high winds